CFA Institute®
Investment Foundations

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Module 6: SERVING CLIENT NEEDS

Chapter 17: Investment Management

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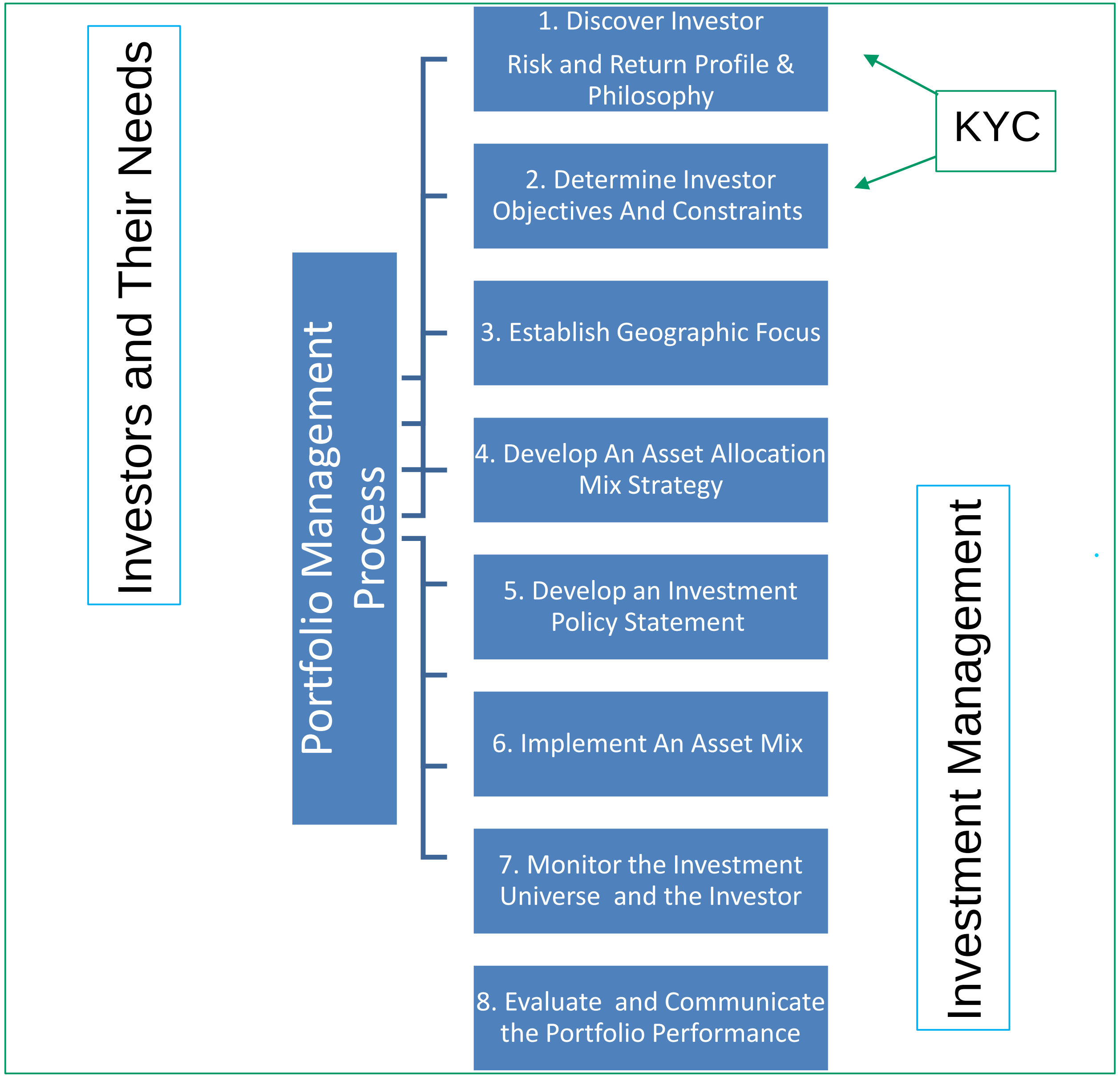
Faculty Bio

Module	Topic	Weight	LOS	Exam Qs	Hours to Study	Module Practice Qs	Chapter Practice Qs
Module 1	**Industry overview**	5%	7	6	5	28	28
Chapter 1	The Investment Industry: A Top-Down View						
Module 2	**Ethics and regulation**	10%	14	12	10	91	
Chapter 2	Ethics and Investment Professionalism						49
Chapter 3	Regulation						42
Module 3	**Inputs and tools**	20%	50	24	20	291	
Chapter 4	Microeconomics						53
Chapter 5	Macroeconomics						57
Chapter 6	Economics of International Trade						47
Chapter 7	Financial Statements						70
Chapter 8	Quantitative Concepts						64
Module 4	**Investment instruments**	20%	29	24	20	213	
Chapter 9	Debt Securities						69
Chapter 10	Equity Securities						72
Chapter 11	Derivatives						42
Chapter 12	Alternative Investments						30
Module 5	**Industry structure**	20%	27	24	20	96	
Chapter 13	Structure of the Investment Industry						28
Chapter 14	Investment Vehicles						29
Chapter 15	The Functioning of Financial Markets						39
Module 6	**Serving client needs**	5%	12	6	5	76	
Chapter 16	Investors and Their Needs						35
Chapter 17	Investment Management						41
Module 7	**Industry controls**	20%	24	24	20	154	
Chapter 18	Risk Management						51
Chapter 19	Performance Evaluation						53
Chapter 20	Investment Industry Documentation						50
	Total	**100%**	**163**	**120**	**100**	**949**	**949**

AFTER COMPLETING THIS CHAPTER, YOU SHOULD BE ABLE TO DO THE FOLLOWING:

a) Describe systematic risk and specific risk;
b) Describe how diversification affects the risk of a portfolio;
c) Describe how portfolios are constructed to address client investment objectives and constraints;
d) Describe strategic and tactical asset allocation;
e) Compare passive and active investment management;
f) Explain factors necessary for successful active management;
g) Describe how active managers attempt to identify and capture market inefficiencies.

INVESTMENT MANAGEMENT PROCESS



SYSTEMATIC AND SPECIFIC RISK

Market-related risk created by general economic conditions

Unique, non-systematic risk that is specific to a certain company or security

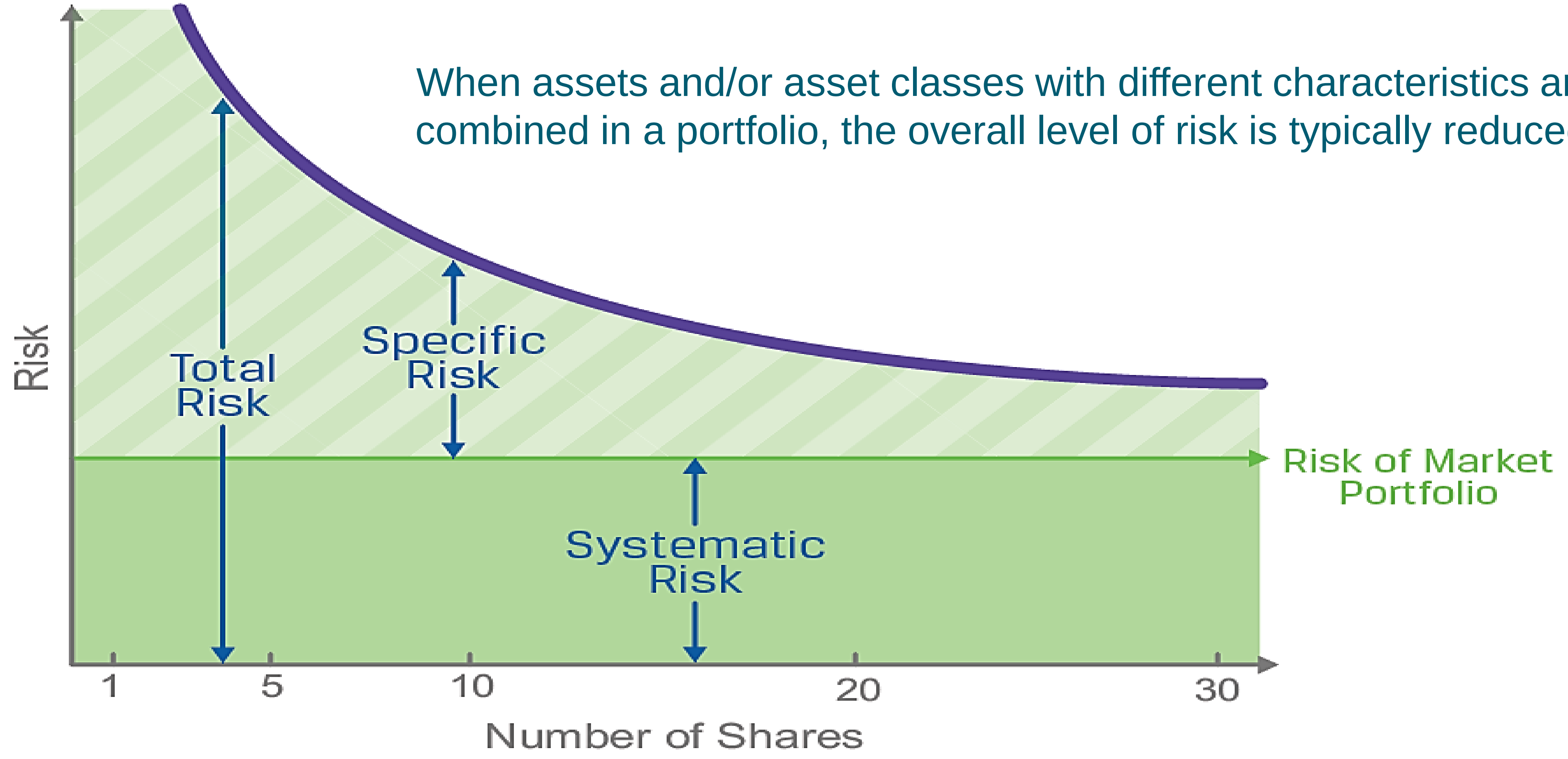
Systematic Risk + Specific Risk = Total Risk

Because specific (non-systematic) risk can be reduced by diversification, total risk can also be reduced.

LOS a: Describe systematic risk and specific risk.

DIVERSIFICATION

When assets and/or asset classes with different characteristics are combined in a portfolio, the overall level of risk is typically reduced.



LOS b: Describe how diversification affects the risk of a portfolio.

VARIANCE AND COVARIANCE OF RETURNS

$$Sample\ Variance:\quad s^2 = \frac{\sum (x_i - \bar{x})^2}{(n-1)}$$

$$Sample\ Variance:\quad s^2 = \sum_{i=1}^{N} \frac{(x_i - \bar{x})(x_i - \bar{x})}{n-1}$$

$$s^2 = \frac{\sum_{t=1}^{T} (R_t - \bar{R})^2}{n-1}$$

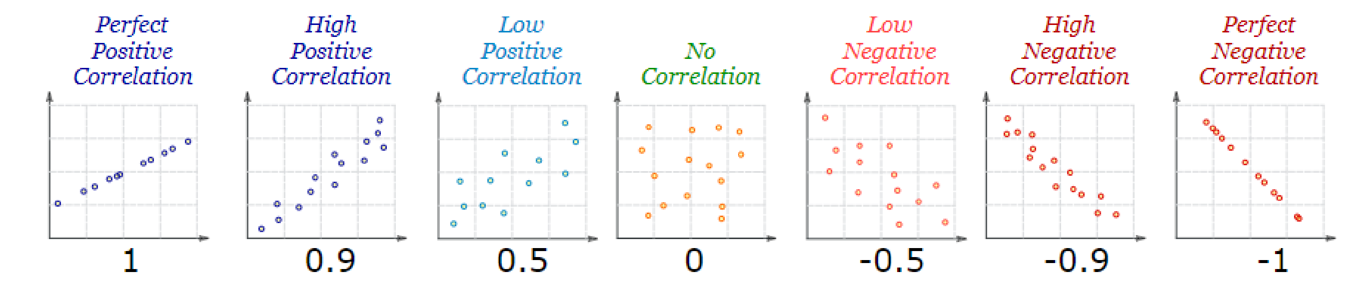
$$\sigma = \sqrt{s^2}$$

This makes the formula look very much like the formula for covariance. For covariance, because we are comparing two different returns, we are simply replacing the second $(x_i - \bar{x})$ with $(y_i - \bar{y})$.

$$cov_{xy} = \sum_{i=1}^{N} \frac{(x_i - \bar{x})(y_i - \bar{y})}{n-1}$$

$$Cor_{xy} = \frac{cov(X,Y)}{\sigma_x \sigma_y} \quad or \quad R_{xy} = \frac{cov(X,Y)}{\sigma_x \sigma_y}$$

$$\mathrm{cov}\ (\mathrm{X}, \mathrm{Y}) = \sigma_x \sigma_y\ x\ R_{xy}$$



https://www.mathsisfun.com/data/correlation.html

LOS b: Describe how diversification affects the risk of a portfolio.

TWO ASSET PORTFOLIO EXPECTED RETURN & STANDARD DEVIATION

Microsoft Excel Worksheet

1. The expected return of a two asset portfolio is:

$$E(R_p) = w_1 R_1 + w_2 R_2$$

2. The standard deviation of a portfolio is the square root of the portfolios variance

$$\sigma_p = \sqrt{w_1^2\,\sigma_1^2 + w_2^2\,\sigma_2^2 + 2 w_1 w_2\, Cov(X_1 Y_2)}$$

We can see that the formulae includes covariance; We can rearrange the formula for covariance

$$\sigma_x \sigma_y \; x \; R_{xy} = \mathrm{cov}\;(\mathrm{X}, \mathrm{Y})$$

We can rewrite the formula for portfolio standard deviation to include correlation

$$\sigma_p = \sqrt{w_1^2\,\sigma_1^2 + w_2^2\,\sigma_2^2 + 2 w_1 w_2 \sigma_1 \sigma_2 \boldsymbol{R_{1,2}}}$$

Any correlation less than 1 then portfolio standard deviation will decrease

LOS b: Describe how diversification affects the risk of a portfolio.

ASSET ALLOCATION

Investment Policy Statement

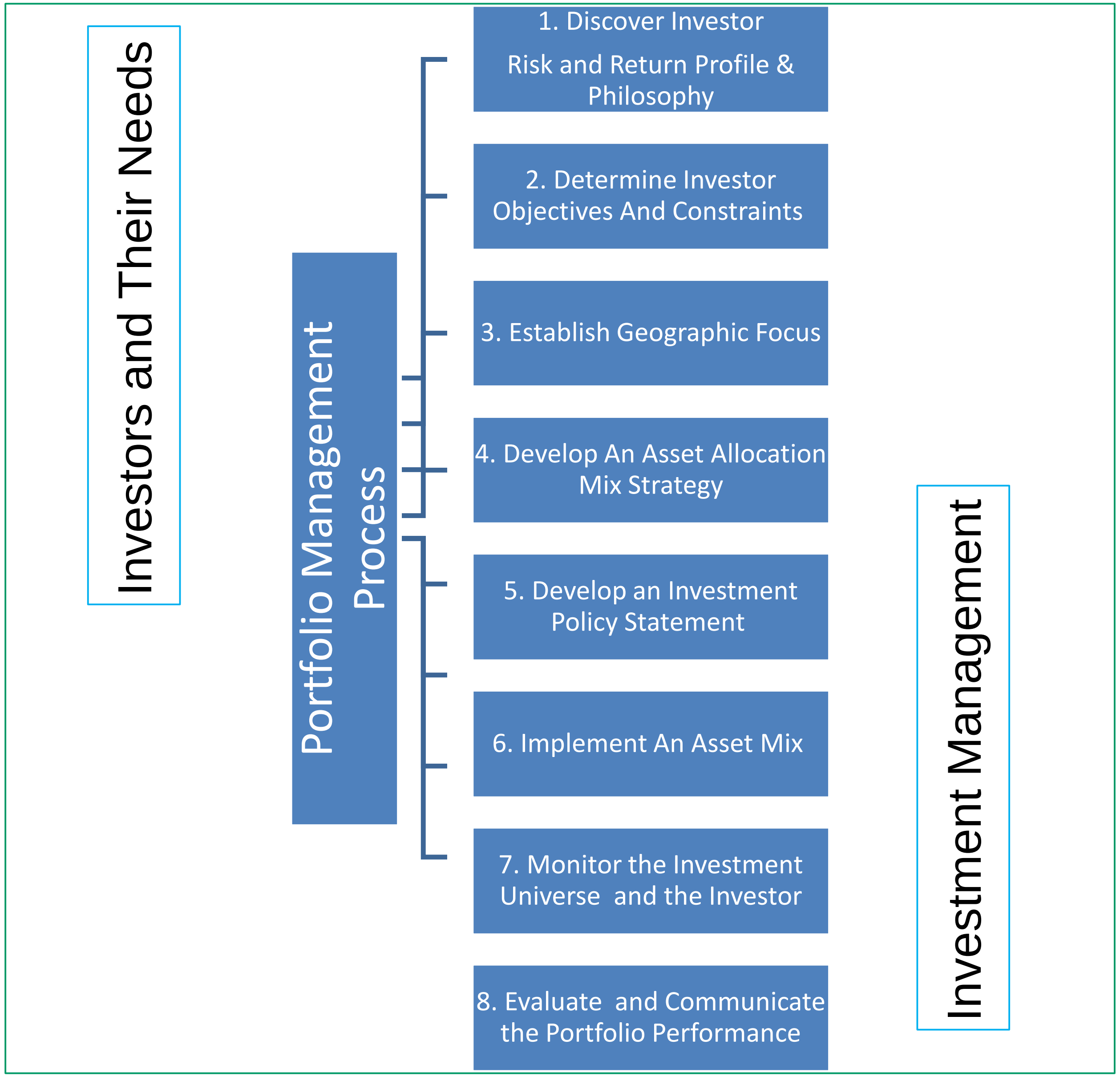
- What are the investor's objectives?
- What are the investor's constraints?

→

Asset Allocation Decision

- Which asset classes do we invest in?
- What portion of the portfolio is invested in each class?

In some cases, the asset allocation decision is documented as part of the IPS; in other cases, asset allocation is regarded as part of the subsequent implementation of the IPS.



LOS c: Describe how portfolios are constructed to address client investment objectives and constraints.

THE STRATEGIC ASSET ALLOCATION PROCESS

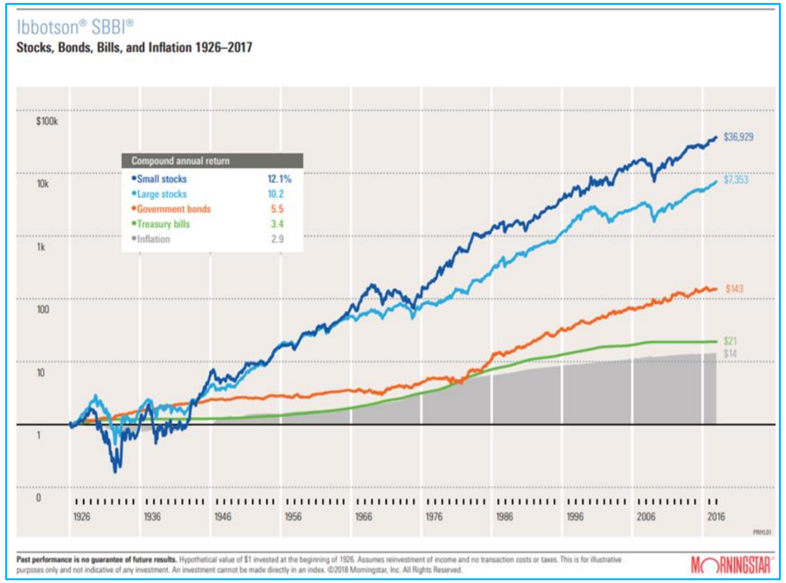
Investors wish to obtain high returns with lower levels of risk; i.e. investments with highly predictable favourable outcomes

Estimate

- Expected Returns
- Risk Measures
- Correlations

Allocate

- Set the Allocation
- Rebalance as Necessary



1926–2012*		Returns	RISK
	Asset Class	**Annual Returns**	**Standard Deviation**
STOCKS	Small-cap	11.9%	33.0%
	Large-cap	**9.8%**	20.9%
BONDS	LT Corporate Bonds	5.7%	9.4%
	LT Treasury Bonds	5.5%	9.0%
CASH	Treasury Bills	3.6%	3.1%
	Inflation	3.0%	4.2%

Source: 2012 Ibbotson SBBI Classic Yearbook

Correlations and volatility GTM - U.S. | 55

	U.S. Large Cap	EAFE	EME	Bonds	Corp. HY	Munis	Currcy.	EMD	Cmdty.	REITs	Hedge funds	Private equity	Ann. Volatility
U.S. Large Cap	1.00	0.89	0.79	-0.31	0.72	-0.18	-0.51	0.58	0.66	0.83	0.87	0.85	15%
EAFE		1.00	0.90	-0.17	0.77	-0.06	-0.67	0.69	0.64	0.75	0.85	0.79	18%
EME			1.00	-0.09	0.88	0.01	-0.70	0.84	0.70	0.66	0.85	0.73	22%
Bonds				1.00	-0.04	0.83	-0.12	0.27	-0.22	0.04	-0.29	-0.39	3%
Corp. HY					1.00	0.08	-0.53	0.87	0.71	0.72	0.83	0.68	12%
Munis						1.00	-0.14	0.43	-0.19	0.10	-0.12	-0.26	4%
Currencies							1.00	-0.61	-0.56	-0.44	-0.44	-0.54	7%
EMD								1.00	0.59	0.63	0.69	0.53	8%
Commodities									1.00	0.56	0.72	0.76	17%
REITs										1.00	0.71	0.74	25%
Hedge funds											1.00	0.84	6%
Private equity												1.00	10%

Source: Barclays Inc., Bloomberg, Cambridge Associates, Credit Suisse/Tremont, FactSet, Federal Reserve, MSCI, NCREIF, Standard & Poor's, J.P. Morgan Asset Management.
Indices used – Large Cap: S&P 500 Index; Currencies: Federal Reserve Trade Weighted Dollar; EAFE: MSCI EAFE; EME: MSCI Emerging Markets; Bonds: Bloomberg Barclays Aggregate; Corp HY: Bloomberg Barclays Corporate High Yield; EMD: Bloomberg Barclays Emerging Market; Cmdty.: Bloomberg Commodity Index; Real Estate: NAREIT ODCE Index; Hedge Funds: CS/Tremont Hedge Fund Index; Private equity: Cambridge Associates Global Buyout & Growth Index. Private equity data are reported on a one-quarter lag. All correlation coefficients and annualized volatility are calculated based on quarterly total return data for period 9/30/08 to 9/30/18, except for Private equity, which is based on the period from 6/30/08 to 6/30/18. This chart is for illustrative purposes only.
Guide to the Markets – U.S. Data are as of September 30, 2018.

J.P.Morgan Asset Management

LOS c: Describe how portfolios are constructed to address client investment objectives and constraints.

PRACTICE Q: MODERATE

All other things being equal, investors prefer higher investment returns with:

A. greater risk.
B. higher volatility.
C. predictable outcomes.

PRACTICE Q: MODERATE

All other things being equal, investors prefer higher investment returns with:

A. greater risk.
B. higher volatility.
C. **predictable outcomes.**

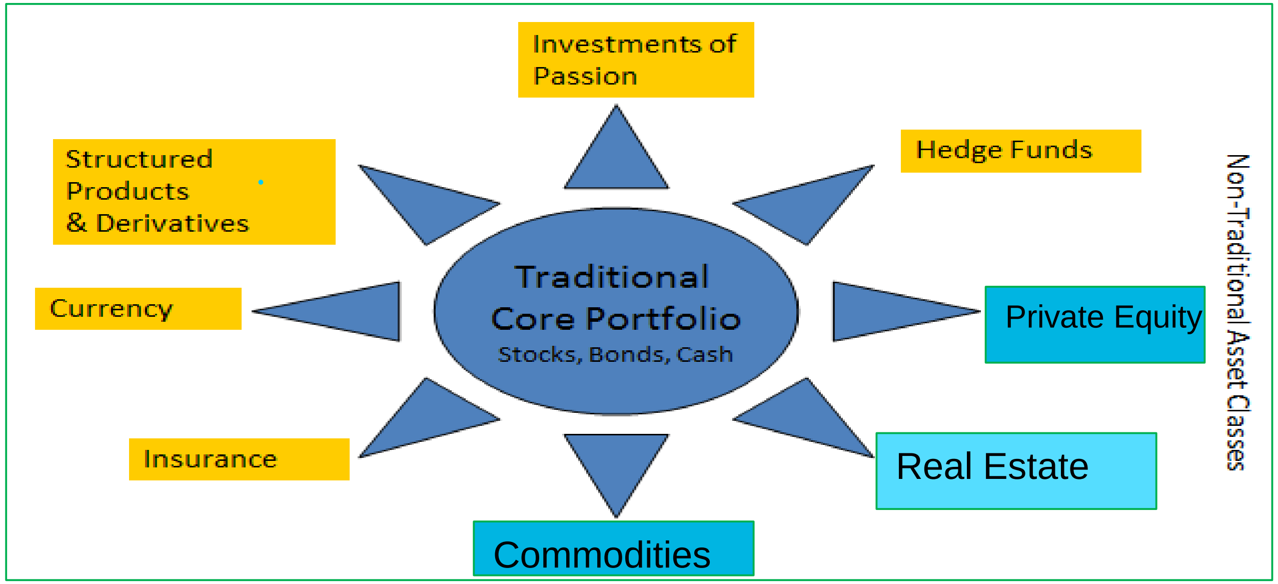
C is correct. All other things being equal, investors want to obtain high returns with lower levels of risk (i.e., investments with highly predictable and favourable outcomes).

A is incorrect because investments with uncertain outcomes would be considered high risk.

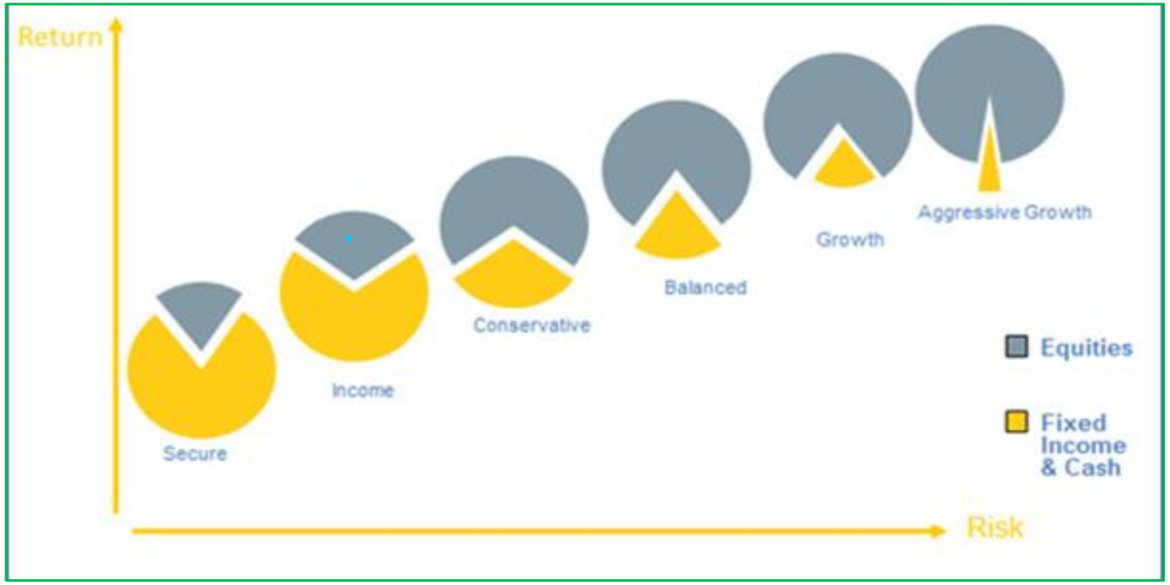
B is incorrect because investors wish to obtain high returns with lower levels of risk; i.e. investments with highly predictable favourable outcomes

STRATEGIC ASSET ALLOCATION

Core-Satellite Investing



Core Portfolio: Traditional Asset Class



	SECURE		INCOME		CONSERVATIVE		BALANCED		GROWTH		AGGRESSIVE GROWTH	
Asset Allocation	**Range**	**Target Mix**	**Range**	**Target Mix**	**Range**	**Target Mix**	**Range**	**Target Mix**	**Range**	**Target Mix**	**Range**	**Target Mix**
Cash	0%-35%	20%	0%-35%	5%	0%-25%	5%	0%-20%	5%	0%-20%	5%	0%-20%	5%
Fixed Income	65%-100%	80%	65%-95%	80%	45%-75%	60%	25%-55%	35%	5%-35%	20%	0%	0%
Equities	0%	0%	5%-25%	15%	15%-55%	35%	35%-75%	60%	55%-95%	75%	80%-100%	95%
Total		100%		100%		100%		100%		100%		100%

LOS d: Describe strategic and tactical asset allocation.

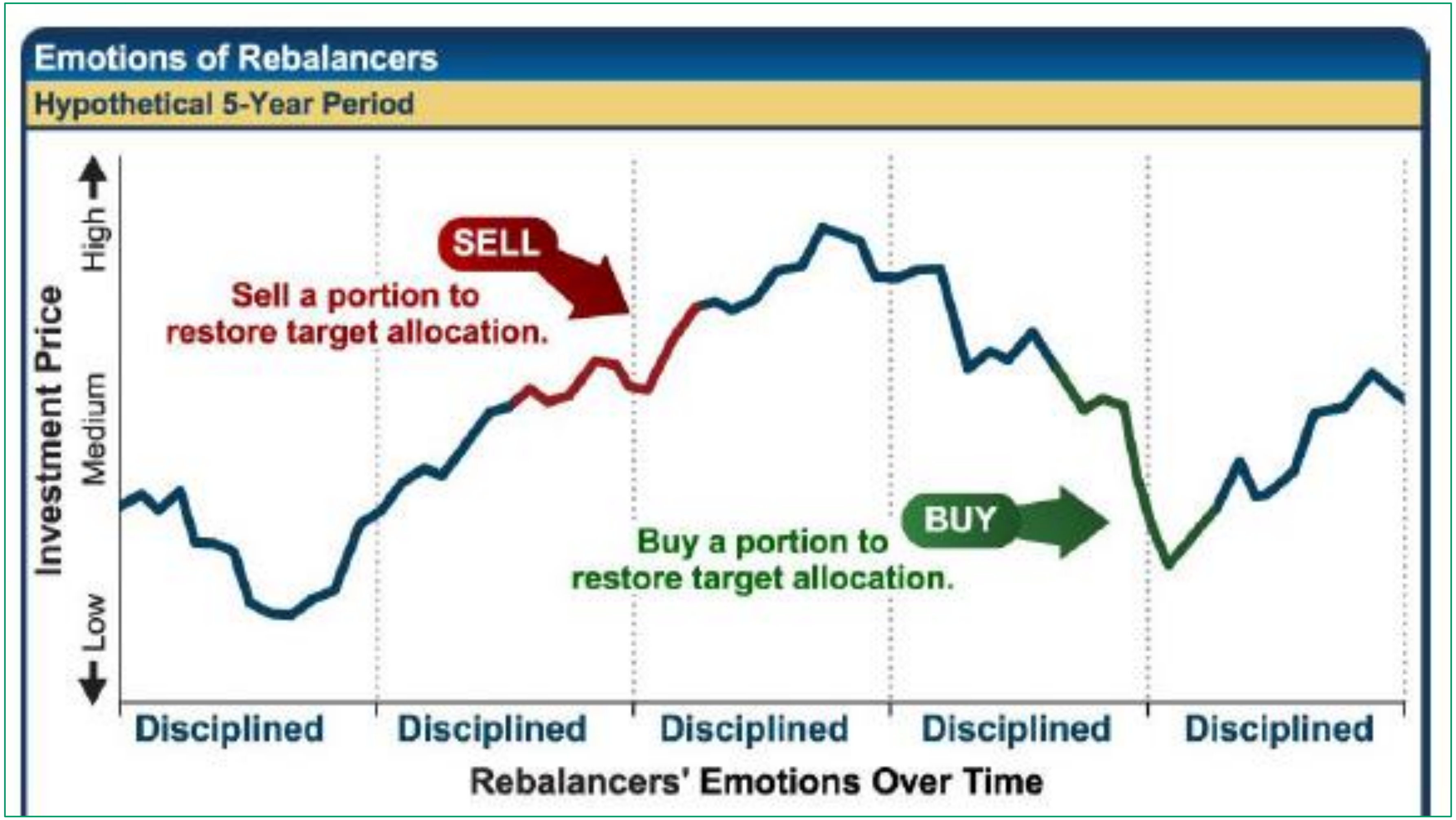
STRATEGIC ASSET ALLOCATION

	GROWTH	
Asset Allocation	**Range**	**Target Mix**
Cash	0%-20%	5%
Fixed Income	5%-35%	20%
Equities	55%-95%	75%
Total		100%

Ticker	**Fixed Income**	**20%**
AGG	iShares Core U.S. Aggregate Bond ETF	20%
	Equities	**75%**
IVV	iShares Core S&P 500 ETF	50%
EFA	iShares MSCI EAFE ETF	10%
IEMG	iShares Core MSCI Emerging Markets ETF	15%

LOS d: Describe strategic and tactical asset allocation.

STRATEGIC ASSET ALLOCATION: REBALANCING



Index Fund Advisors Inc. (2014)

STRATEGIC ASSET ALLOCATION: REBALANCING

In his book *The Investor's Manifesto: Preparing for Prosperity, Armageddon and Everything in Between*, William Bernstein recommends rebalancing a non-taxable account every two to three years. (W. J. Bernstein 2012)

For taxable accounts, he recommends rebalancing less frequently. Why? Because every time you sell a stock for a capital gain, you'll pay tax. You'll also pay a commission every time you buy and sell a stock or exchange-traded fund.

"Rebalance your portfolio approximately once every few years; more than once per year is probably too often. In taxable portfolios, do so even less frequently," Bernstein writes. (W. J. Bernstein 2012)

John Bogle compared the performance of rebalanced against non-rebalanced portfolios (each starting with a 50-50 split of stocks and bonds) over consecutive 25-year periods going back to 1826. The portfolios that were rebalanced annually won 52% of the time - a result so insignificant he considers it "noise.“

In a second study, Bogle examined a diversified index portfolio of United States large caps (48%), small caps (16%), international stocks (16%) and bonds (20%) for the 20 years ending in 2006. When the portfolio was rebalanced annually, it returned 9.71%, compared with 9.49% with no rebalancing—a difference he also dismissed as noise. (Bogle 2000)

STRATEGIC ASSET ALLOCATION: REBALANCING

Index Fund Advisors Inc. (2014)

STRATEGIC ASSET ALLOCATION

Most investors, of course, have not made the study of business prospects a priority in their lives. If wise, they will conclude that they do not know enough about specific businesses to predict their future earning power.

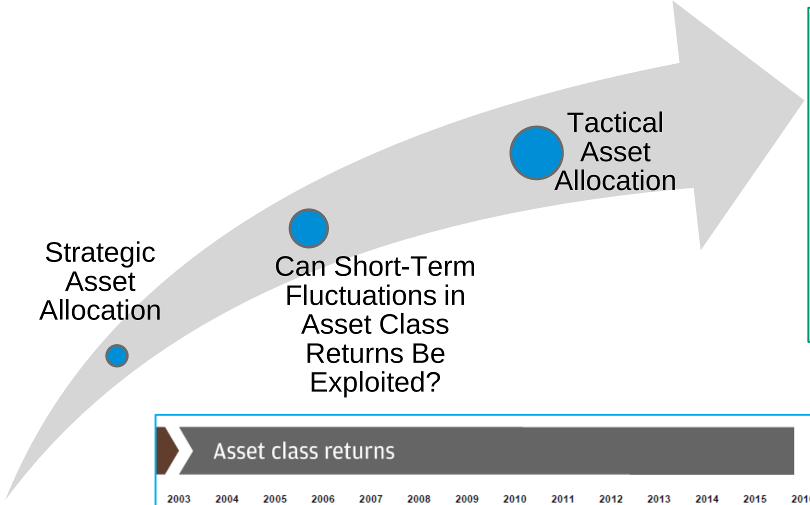
I have good news for these non-professionals: The typical investor doesn't need this skill.

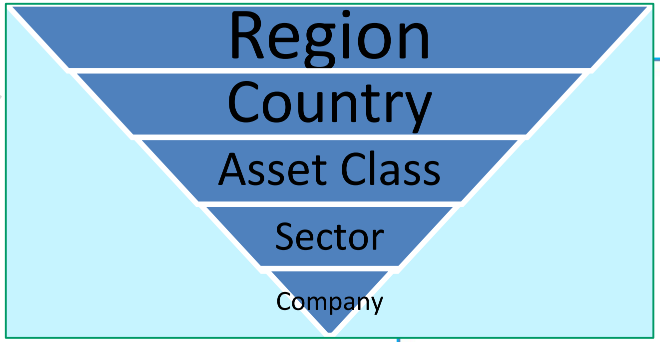
In aggregate, American business has done wonderfully over time and will continue to do so (though, most assuredly, in unpredictable fits and starts). In the 20th century, the Dow Jones Industrial Index advanced from 66 to 11,497, paying a rising stream of dividends to boot.

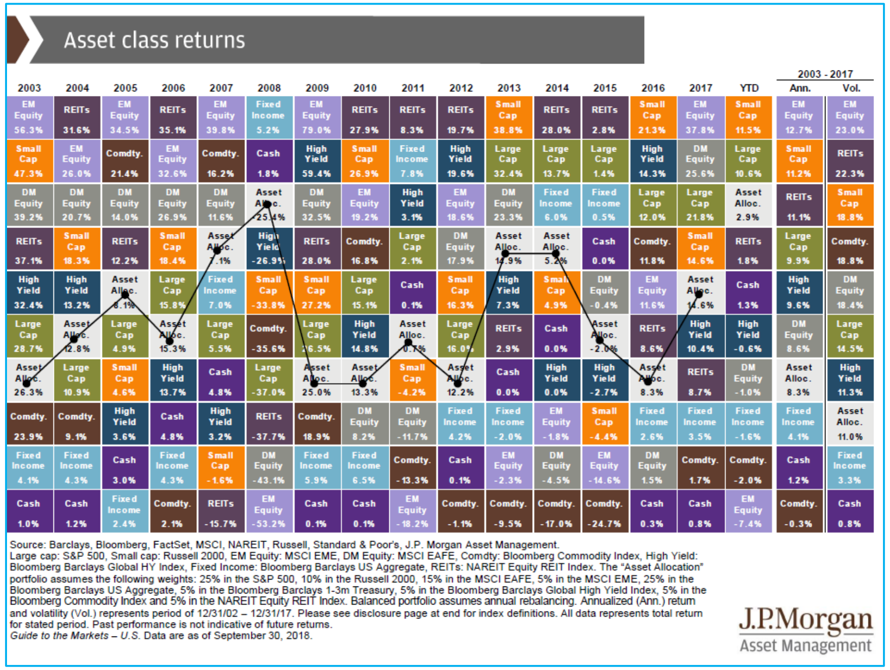
The 21st century will witness further gains, almost certain to be substantial.

The goal of the nonprofessional should not be to pick winners— neither she nor her "helpers" can do that —but should rather be to own a cross-section of businesses that in aggregate are bound to do well. A low-cost S&P 500 index fund will achieve this goal.

TACTICAL ASSET ALLOCATION







Asset class returns

																2003 - 2017 Ann.	Vol.
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	YTD	Ann.	Vol.
EM Equity 56.3%	REITs 31.6%	EM Equity 34.5%	REITs 35.1%	EM Equity 39.8%	Fixed Income 5.2%	EM Equity 79.0%	REITs 27.9%	REITs 8.3%	REITs 19.7%	Small Cap 38.8%	REITs 28.0%	REITs 2.8%	Small Cap 21.3%	EM Equity 37.8%	Small Cap 11.5%	EM Equity 12.7%	EM Equity 23.0%
Small Cap 47.3%	EM Equity 26.0%	Comdty. 21.4%	EM Equity 32.6%	Comdty. 16.2%	Cash 1.8%	High Yield 59.4%	Small Cap 26.9%	Fixed Income 7.8%	High Yield 19.6%	Large Cap 32.4%	Large Cap 13.7%	Large Cap 1.4%	High Yield 14.3%	DM Equity 25.6%	Large Cap 10.6%	Small Cap 11.2%	REITs 22.3%
DM Equity 39.2%	DM Equity 20.7%	DM Equity 14.0%	DM Equity 26.9%	DM Equity 11.6%	Asset Alloc. -25.4%	DM Equity 32.5%	EM Equity 19.2%	High Yield 3.1%	EM Equity 18.6%	DM Equity 23.3%	Fixed Income 6.0%	Fixed Income 0.5%	Large Cap 12.0%	Large Cap 21.8%	Asset Alloc. 2.9%	REITs 11.1%	Small Cap 18.8%
REITs 37.1%	Small Cap 18.3%	REITs 12.2%	Small Cap 18.4%	Asset Alloc. 7.1%	High Yield -26.9%	REITs 28.0%	Comdty. 16.8%	Large Cap 2.1%	DM Equity 17.9%	Asset Alloc. 14.9%	Asset Alloc. 5.2%	Cash 0.0%	Comdty. 11.8%	Small Cap 14.6%	REITs 1.8%	Large Cap 9.9%	Comdty. 18.8%
High Yield 32.4%	High Yield 13.2%	Asset Alloc. 8.1%	Large Cap 15.8%	Fixed Income 7.0%	Small Cap -33.8%	Small Cap 27.2%	Large Cap 15.1%	Cash 0.1%	Small Cap 16.3%	High Yield 7.3%	Small Cap 4.9%	DM Equity -0.4%	EM Equity 11.6%	Asset Alloc. 14.6%	Cash 1.3%	High Yield 9.6%	DM Equity 18.4%
Large Cap 28.7%	Asset Alloc. 12.8%	Large Cap 4.9%	Asset Alloc. 15.3%	Large Cap 5.5%	Comdty. -35.6%	Large Cap 26.5%	High Yield 14.8%	Asset Alloc. 0.7%	Large Cap 16.0%	REITs 2.9%	Cash 0.0%	Asset Alloc. -2.0%	REITs 8.6%	High Yield 10.4%	High Yield -0.6%	DM Equity 8.6%	Large Cap 14.5%
Asset Alloc. 26.3%	Large Cap 10.9%	Small Cap 4.6%	High Yield 13.7%	Cash 4.8%	Large Cap -37.0%	Asset Alloc. 25.0%	Asset Alloc. 13.3%	Small Cap -4.2%	Asset Alloc. 12.2%	Cash 0.0%	High Yield 0.0%	High Yield -2.7%	Asset Alloc. 8.3%	REITs 8.7%	DM Equity -1.0%	Asset Alloc. 8.3%	High Yield 11.3%
Comdty. 23.9%	Comdty. 9.1%	High Yield 3.6%	Cash 4.8%	High Yield 3.2%	REITs -37.7%	Comdty. 18.9%	DM Equity 8.2%	DM Equity -11.7%	Fixed Income 4.2%	Fixed Income -2.0%	EM Equity -1.8%	Small Cap -4.4%	Fixed Income 2.6%	Fixed Income 3.5%	Fixed Income -1.6%	Fixed Income 4.1%	Asset Alloc. 11.0%
Fixed Income 4.1%	Fixed Income 4.3%	Cash 3.0%	Fixed Income 4.3%	Small Cap -1.6%	DM Equity -43.1%	Fixed Income 5.9%	Fixed Income 6.5%	Comdty. -13.3%	Cash 0.1%	EM Equity -2.3%	DM Equity -4.5%	EM Equity -14.6%	DM Equity 1.5%	Comdty. 1.7%	Comdty. -2.0%	Cash 1.2%	Fixed Income 3.3%
Cash 1.0%	Cash 1.2%	Fixed Income 2.4%	Comdty. 2.1%	REITs -15.7%	EM Equity -53.2%	Cash 0.1%	Cash 0.1%	EM Equity -18.2%	Comdty. -1.1%	Comdty. -9.5%	Comdty. -17.0%	Comdty. -24.7%	Cash 0.3%	Cash 0.8%	EM Equity -7.4%	Comdty. -0.3%	Cash 0.8%

Source: Barclays, Bloomberg, FactSet, MSCI, NAREIT, Russell, Standard & Poor's, J.P. Morgan Asset Management.
Large cap: S&P 500, Small cap: Russell 2000, EM Equity: MSCI EME, DM Equity: MSCI EAFE, Comdty: Bloomberg Commodity Index, High Yield: Bloomberg Barclays Global HY Index, Fixed Income: Bloomberg Barclays US Aggregate, REITs: NAREIT Equity REIT Index. The "Asset Allocation" portfolio assumes the following weights: 25% in the S&P 500, 10% in the Russell 2000, 15% in the MSCI EAFE, 5% in the MSCI EME, 25% in the Bloomberg Barclays US Aggregate, 5% in the Bloomberg Barclays 1-3m Treasury, 5% in the Bloomberg Barclays Global High Yield Index, 5% in the Bloomberg Commodity Index and 5% in the NAREIT Equity REIT Index. Balanced portfolio assumes annual rebalancing. Annualized (Ann.) return and volatility (Vol.) represents period of 12/31/02 – 12/31/17. Please see disclosure page at end for index definitions. All data represents total return for stated period. Past performance is not indicative of future returns.
Guide to the Markets – U.S. Data are as of September 30, 2018.

J.P.Morgan Asset Management

Investment Strategy

	Strategic Asset Allocation	Tactical Asset Allocation
Goal:	Definition of the optimal long-term investment strategy (5-10 yrs)	Taking advantage of short- to medium term opportunities (0-3 yrs)
Assumptions:	Markets are efficient, assets are at fair value	Markets are inefficient, (some) assets are not at fair value
Application:	Definition of benchmark	Active management
Required Input:	Long term risk- and return assumptions	Models to identify mis-valuation of assets

Source: (Credit Suisse 2013)

LOS d: Describe strategic and tactical asset allocation.

PRACTICE Q: EXPERT

When making tactical asset allocation decisions, an asset manager would rely on which of the following tools?

A. Trend analysis.
B. Expected returns for asset classes.
C. Correlation of returns between asset classes.

PRACTICE Q: EXPERT

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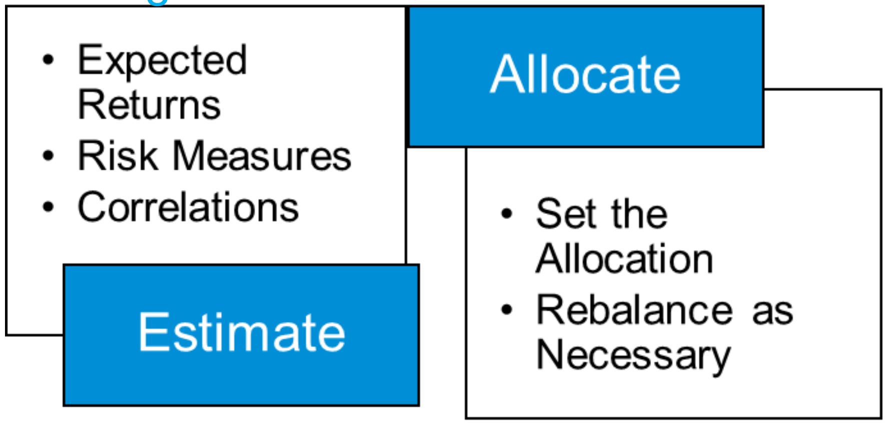
strategic asset allocation

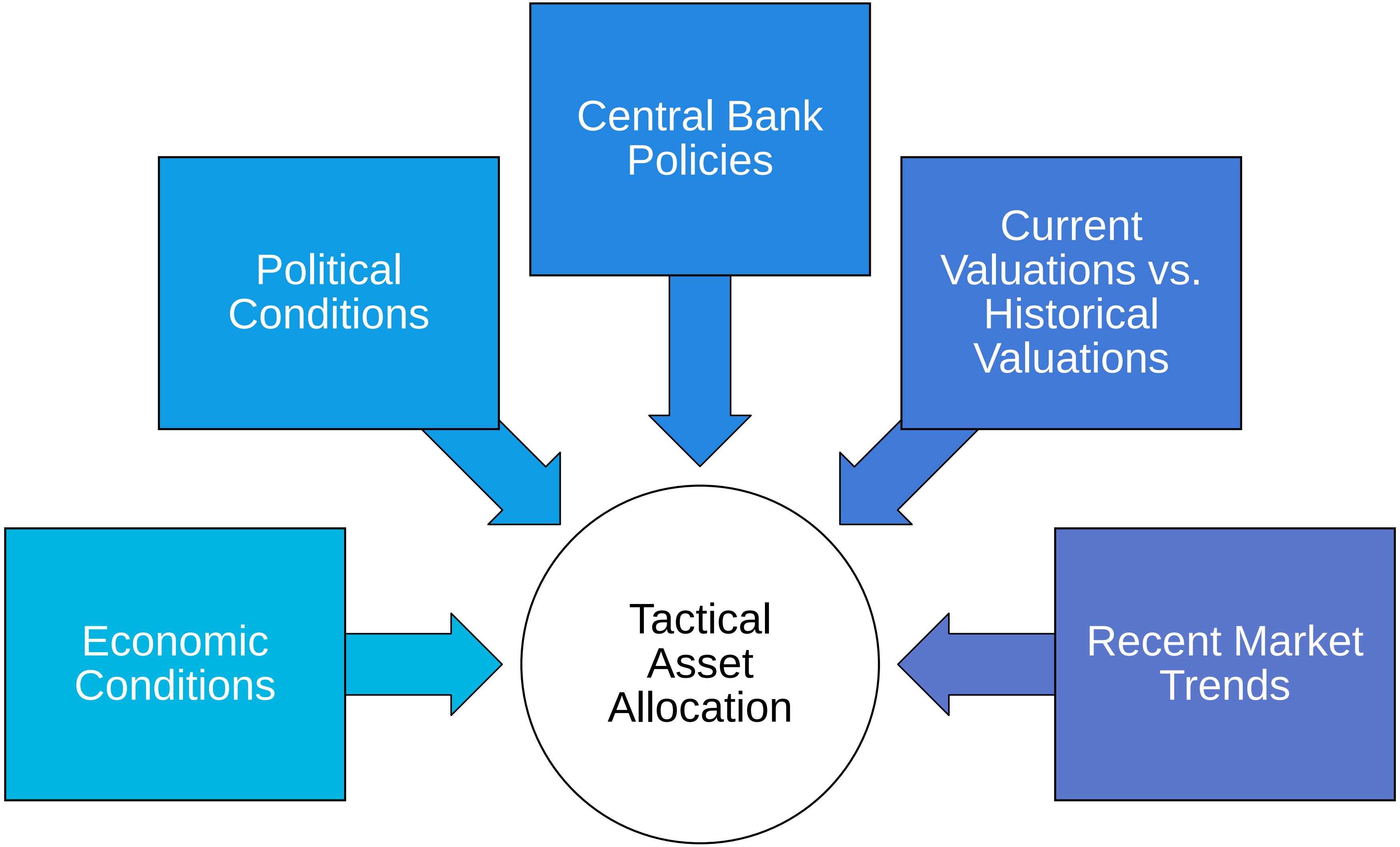


A is correct. An investor or manager typically uses a variety of tools and inputs to make tactical allocation decisions and trend analysis is one such tool.

B is incorrect because expected returns for asset classes is used in strategic asset allocation.

C is incorrect because correlation of returns between asset classes is used in strategic asset allocation.

FACTORS AFFECTING TACTICAL ASSET ALLOCATION



LOS d: Describe strategic and tactical asset allocation.

PRACTICE Q: EXPERT

Which of the following would be a valid reason for an asset manager to deviate from an investor's strategic asset allocation?

A. A change in economic conditions
B. A large change in the investor's risk profile
C. To exploit short-term investment opportunities

PRACTICE Q: EXPERT

Which of the following would be a valid reason for an asset manager to deviate from an investor's strategic asset allocation?

A. A change in economic conditions

B. A large change in the investor's risk profile

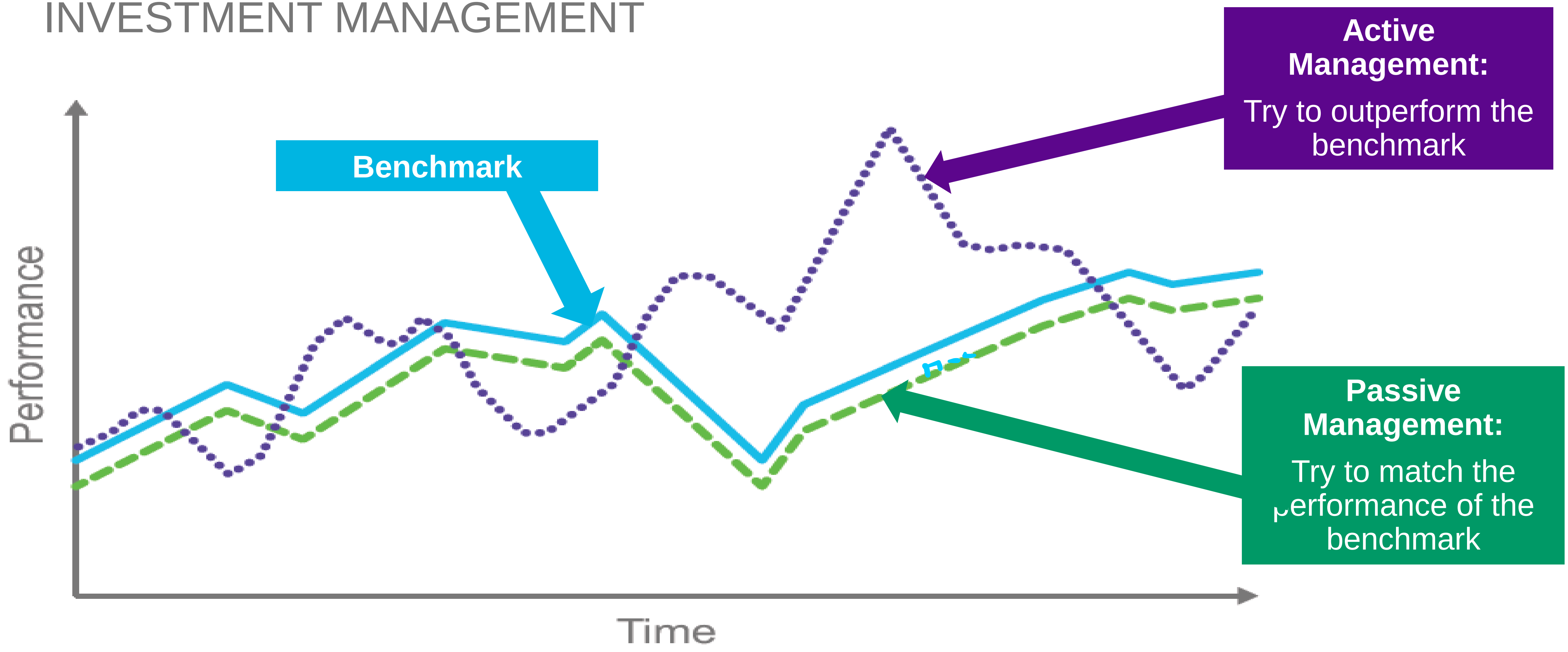
C. To exploit short-term investment opportunities

B is correct. A large change in an investor's risk profile would likely call for a change in the strategic asset allocation.

A is incorrect because a change in economic conditions might drive a tactical asset allocation decision not a change in strategic asset allocation.

C is incorrect because portfolio managers through tactical or active management may move outside the strategic range in the short run to take advantage of short term investment opportunities.

PASSIVE AND ACTIVE INVESTMENT MANAGEMENT



LOS e: Compare passive and active investment management.

PASSIVE OR ACTIVE?

Factors	Passive or Active?
Costs	Passive is typically cheaper to implement.
Needed to outperform	Active managers must either have access to better information or be able to respond and use the information faster or have better models to process the information than other investors.
Unique products	For some markets, such as real estate, in which all properties are unique and trading is done in private transactions, it is less clear how a passive approach can be used.
Performance	Passive tries to match the benchmark. Active tries to beat the benchmark, but most active managers have average or below-average records.

LOS f: Explain factors necessary for successful active management.

PRACTICE Q: DIFFICULT

Compared with passive management of a particular asset class, active management most likely:

A. has lower transactions costs.
B. results in a riskier portfolio.
C. requires more analytical resources.

PRACTICE Q: DIFFICULT

Compared with passive management of a particular asset class, active management most likely:

A. has lower transactions costs.

B. results in a riskier portfolio.

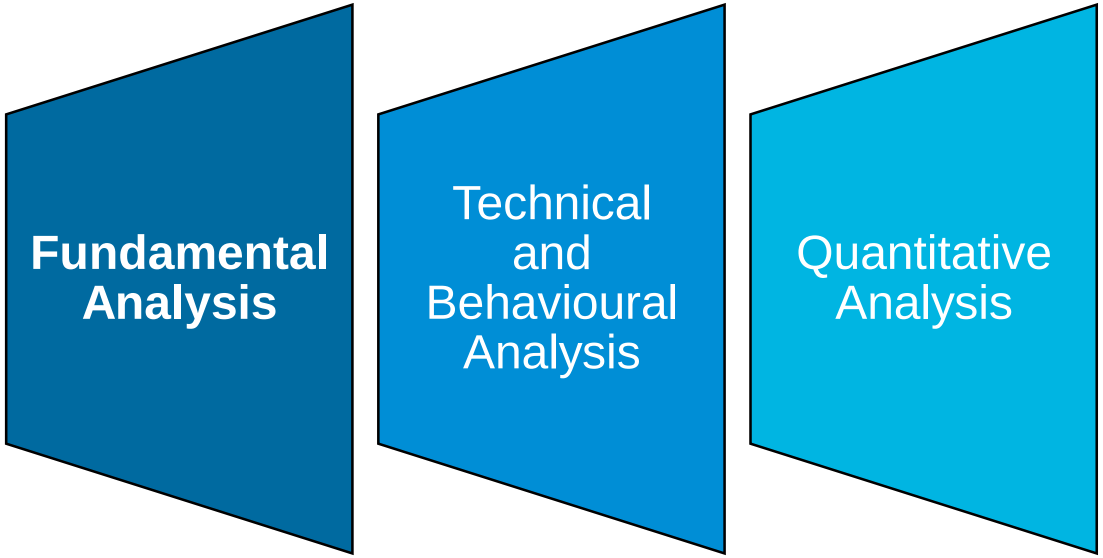
C. requires more analytical resources.

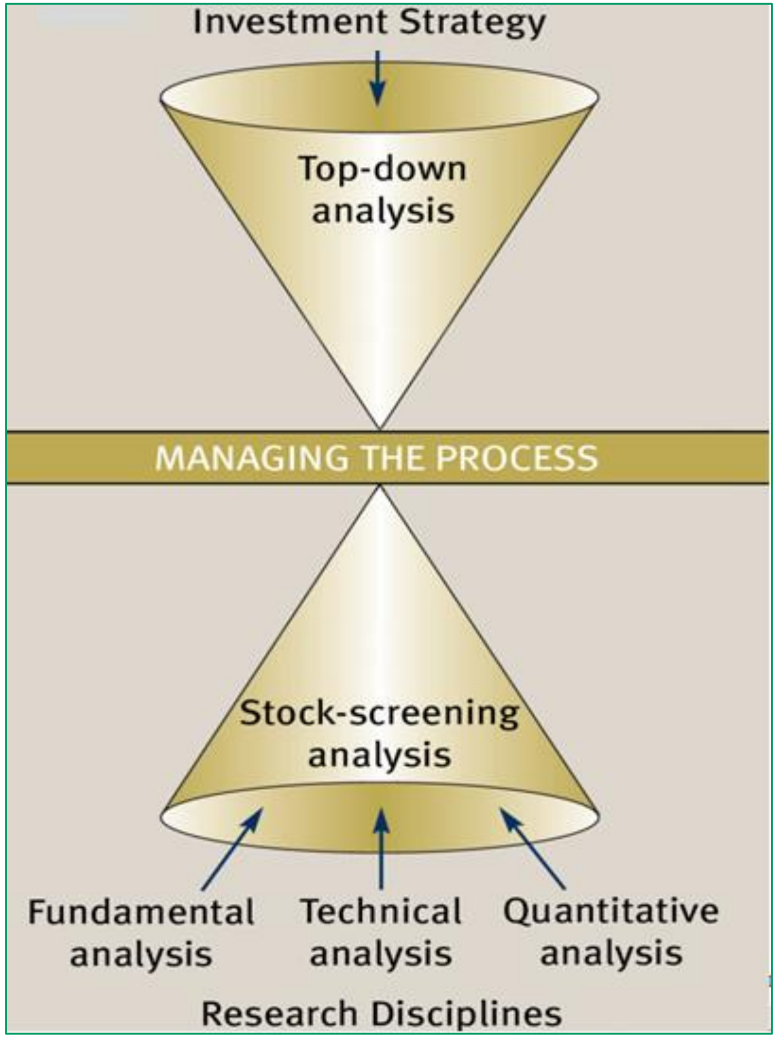
C is correct. Active management of an asset class, which involves analysing and selecting undervalued securities, requires more skilled employees, data, and computing power than passive management.

A is incorrect. Active management typically involves more trading than passive investing as newly discovered underpriced securities are purchased and newly discovered overpriced securities are sold from the portfolio.

B is incorrect. For the same asset class, an actively managed portfolio might be more risky, less risky or of the same level of risk. On average, an actively managed portfolio would have the same level of risk as the asset class as a whole.

IDENTIFYING AND CAPTURING MARKET INEFFICIENCIES





Source: (RBC 2008)

LOS g: Describe how active managers attempt to identify and capture market inefficiencies.

PRACTICE Q: EXPERT

An active investment manager who studies large institutional investors and attempts to predict when they will sell large positions in securities so as to trade in advance of the large volume is most likely engaging in:

A. technical analysis.

B. quantitative analysis.

C. fundamental analysis.

PRACTICE Q: EXPERT

An active investment manager who studies large institutional investors and attempts to predict when they will sell large positions in securities so as to trade in advance of the large volume is most likely engaging in:

A. technical analysis.

B. quantitative analysis.

C. fundamental analysis.

A is correct. Technical analysts try to predict changes in the prices of securities by analysing past prices, trading volumes, and supply and demand factors.

B is incorrect. A quantitative analyst looks for statistical relationships between past prices and other company or economic data.

C is incorrect. A fundamental analyst examines companies in order to estimate the intrinsic value of their securities and thereby identify under- or over-priced securities.

PASSIVE OR ACTIVE?

Charles Ellis, in his article Three Ways to Succeed as an Investor, outlines three approaches of investing (Ellis 2001):

1. *The Intellectually Difficult Approach*
2. *The Physically Difficult Approach*
3. *The Psychologically Difficult Approach*

Intellectually difficult investing is pursued by those who have a deep and profound understanding of the true nature of investing, see the future more clearly, and take long-term positions that turn out to be remarkably successful.

Most of the crowd is deeply involved in the physically difficult way of beating the market. In every way they can, they put enormous energy into trying to beat the market by outworking the competition. What they don’t seem to recognize is that so is almost everyone else.

Being incapable of doing the intellectually difficult, and reluctant about the physically difficult, I have set about the emotionally difficult approach to investing. **This straightforward, untiring approach is simply to work out the long-term investment policy that’s truly right for you and your particular circumstances and is realistic given the history of the capital markets, commit to it, and - here is the emotionally difficult part – hold on.** (Ellis 1998)